

Work Order ID 58800

Page 1

Wednesday, May 19, 2010 9:19:30 AM

Item ID: D350-636-011

Accept



Setup Start



Revision ID: *

Item Name: Skidtube LH

Stop



Start Date: 5/18/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 5/25/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan: 11Date: 10-5-9

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D2750

Rev F

100

0.00



DOCUMENT CONTROL

DC

0.00

Document Control

Memo

Photocopy blue file and type labels per PPP D350-636-011 CHG 005

5 10/06/11

10 for BG 10/06/11

58800.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Run HoursDraw
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QtyReject
QtyReject
NumberInsp.
Stamp

110

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1- Mark cut line on aft end of D2600-3-Bent using Jig DT 8150. Cut to length as per Dwg D2750. Deburr end

2-Drill pilot holes as per Dwg D2750 sheet 4 (D2750-1 details).Drill using drill Jig DT8150 & DT8863.

3- Mark fwd end for cutting using Drill Jig DT 8150 & DT8863 and cut as per dwg D2750.Deburr.

4- Drill fwd step holes using DT9616. Ensure proper positioning.

5- drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500"

6- locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade fitting

7-Open up holes for Detail B to 0.375" (4 holes per side)and blade fitting location holes to 0.500" (total of 4 holes per side) as per dwg D2750 .Open up holes for ground handling and detail C to 0.500" (8 holes per side)

8-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to 0.297".

9-Open up holes of Detail A to 0.297" (total of 2 holes per side)

10-Weld D2744 Cap as per Dwg D2750 and QSI 004.Fill grooves in bend left from bending as per QSI 004

A/R ☐ ☐ Aluminum Rod☐ M112860

BE

10/05/26

10-5-26

W/O:		WORK ORDER CHANGES					
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QtyReject
NumberInsp.
Stamp

11-Grind welds flush as per Dwg D2750

12- Scribe batch# inside per dwg D2750

M 10/5/27

120

QC10- Inspect visual per QSI004- ground welds

0.00

S 10/5/27



QC

Memo

0.00

Quality Control

130

QC5- Inspect part completeness to step on W/O

0.00

S 10/5/27



QC

Memo

0.00

Quality Control

10

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NumberDraw
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CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

1 10/5/27

150

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

DP 10-5-27

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160		0.00							
	Skidtubes								
Skidtubes	Memo	0.00							
Skidtubes	1-Open up holes of Detail C and ground handling to 0.625" (total of 8 holes per side) as per dwg D2750.								
	2-Open up holes of Detail B to 0.750" (total of 4 holes per side) as per dwg D2750.								
	3- Open float hole to 0.500" (4 per side)								
	4-Chamfer holes of Detail B, C, ground handling and float holes per dwg D2750 (welding instructions on sheet 8)								
	5-Deburr and blow out all chips from inside of tube								
	6- Prepare tube for welding, remove alodine as required.								
	7-Bond web D2739 in place as per QSI 015 A/R <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Sikaflex-291 batch: <u>M113435</u> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> exp. date: <u>10/15/20</u>								
	8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 8) A/R <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Aluminum Rod batch: <u>M114242</u>								
	9- At section AJ-AJ drill out x-bolt spacer to 0.404"								
	10-Grind welds flush as per Dwg D2750								

M 10/15/27

BE 10/06/07

BB 10/06/07

DP 10-6-7

W/O:		WORK ORDER CHANGES					
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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
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DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp11-Spot face ground handling holes section (total of 4 places per side) as per
dwg D2750

12-Deburr holes

170



QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

Memo

0.00

8/10/06/08

DP 10-6-7

180



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

8/10/06/08

10

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Run Start



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Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

Hand Finishing

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

200

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME: 1:00pm
OVEN TEMPERATURE: 320°C
FINISH TIME: 1:30pm

210

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

Inspect for foreign object per QSI 024

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

220

0.00



HandFinishing

HandFinish

Memo

0.00

Hand Finishing

1- Install inserts as per Dwg D2750

1 BR 10-6-9

230

0.00



HandFinishing

HandFinish

Memo

0.00

Hand Finishing

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3" batch: _____

3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750

SIKA FLEX 241

BATCH: 11/13/35

EXP DATE: 10/11

4-assemble o-ring to plug as per dwg D3492 and apply o-ring lube

A/R 55-o-ring lube batch: 11/4/89

5-Coat all exposed fasteners with "LPS Procyon" batch: 104251

1 BR 10-6-9

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Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

240

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8/10/2010



250

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

10-6-11

260

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

*****ensure antiseize is on AN8C21A bolts*****

8/10/2010



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Accept

**Setup Start**

Stop

1

Cust Item ID:

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center ID

Operation Description

Set Up/ Run Hours

**Draw
Number**

**Draw
Rev.**

Plan
Code

**Accept
Qty**

Reject
Qty

Reject Number

**Insp.
Stamp**

270

0.00

Packaging

Packaging

Memo

0.00

Packaging

Package as per PPP D350-636-011

REV-H

280

280 QC21- Final Inspection - Work Order Release

0.00

Abstract

Memo

0.00

QC

Quality Control

10/06/17

ME

10-6-17

W/O:		WORK ORDER CHANGES					
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Picklist Print

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Page 1

Work Order ID: 58800

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Comments: IPP Rev: I 02.09.25 Rearranged procedure steps KJ
IPP Rev: J 06-03-23 As per Rev D JLM
IPP Rev: K 06-07.13 As per dsi9343 EC
IPP Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC

Start Date: 5/18/2010

Required Date: 5/25/2010

Start Qty: 1.00

Required Qty: 1.00

D2594-3 Manufactured No 230 Each 359.0000 8
O-Ring, 205 Skidtube

Location	Loc Qty	Loc Code
FP	359	
55546	19	
58191 ✓	340	

D2744 Manufactured No 110 Each 28.0000 1
Cap

Location	Loc Qty	Loc Code
LG	28	
47488	10	
51922	18	

D2600-3-BENT Manufactured No 110 Each 2.0000 1
Extrusion Bent

Location	Loc Qty	Loc Code
LG	2	
55462	1	
57538	1	

D2743 Manufactured No 160 Each 114.0000 8
Crossbolt Spacer

Location	Loc Qty	Loc Code
LG	114	
50281	10	
52310	24	
57953	80	

8 BR 10-6-9.

1 BE 10/05/26

BS8903 D K 12/9/26

59111 108 BE 10/06/07

W/O:		WORK ORDER CHANGES					
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IPP Rev:K 06-07.13 As per dsi9343 EC
IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC

Start Date: 5/18/2010

Required Date: 5/25/2010

Start Qty: 1.00

Required Qty: 1.00

D2739 Manufactured No 160 Each 1.0000 1



350 I Beam

Location	Loc Qty	Loc Code
LG	1	

57948

D3490-3 Manufactured No 160 Each 31.0000 4



Cross Bolt Spacer

Location	Loc Qty	Loc Code
LG	31	

57918

D3490-1 Manufactured No 160 Each 25.0000 4



Cross Bolt Spacer

Location	Loc Qty	Loc Code
LG	25	

57723

ALS4-1032-225 Purchased No 220 Each 7,062.000 38



Insert

Location	Loc Qty	Loc Code
PK011	7062	

110768 ✓

7062

38

BR 10-6-9.

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Shop Packet Print

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IPP Rev: K 06-07.13 As per dsi9343 EC
IPP Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC

Start Qty: 1.00

Required Qty: 1.00

D3492-041

Manufactured No 230 Each 98.0000 8



Plug Assembly

Location	Loc Qty	Loc Code
FP013	98	
57915	38	
58180	60	

D3793-3

Manufactured No 230 Each 11.0000 1



Wearshoe

Location	Loc Qty	Loc Code
FP19	11	
57947	11	

AN8C35A

Purchased No 230 Each 56.0000 1



BOLT

Location	Loc Qty	Loc Code
FP	6	
110847	6	
ST346	50	
114442	50	

D3793-1

Manufactured No 230 Each 10.0000 1



Wearshoe

Location	Loc Qty	Loc Code
FP18	10	
56300	1	
57945	9	

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8 BR 10-6-9

1 BR 10-6-9

1 BR 10-6-9

1 BR 10-6-9

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Start Qty: 1.00

Required Qty: 1.00

IPP Rev:J 06-03-23 As per Rev D JLM

IPP Rev:K 06-07.13 As per dsi9343 EC

IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC

D3488-041

Manufactured No

230

Each

29.0000

1



Blade Fitting Assembly, LH

Location

Loc Qty

Loc Code

FP

19

53915

19

FP007

10

56052 ✓

10

D3794-3

Manufactured No

230

Each

14.0000

1



Gasket

Location

Loc Qty

Loc Code

FP18

14

56066 39153

14

AN6C44A

Purchased No

230

Each

101.0000

4



BOLT

Location

Loc Qty

Loc Code

FG

2

103964

2

ST344

99

111649

2

114455 ✓

47

114653

50

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Shop Packet Print

Page 4

1 BR 10-6-9.

1 BR 10-6-9

4 BR 10-6-9.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 5

Work Order ID: 58800

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Comments: IPP Rev:I 02.09.25 Rearranged procedure steps KJ
IPP Rev:J 06-03-23 As per Rev D JLM
IPP Rev:K 06-07.13 As per dsi9343 EC
IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC

Start Date: 5/18/2010

Required Date: 5/25/2010

Start Qty: 1.00

Required Qty: 1.00

MS21083C8

Purchased No

230 Each

41.0000

1



NUT

Location

Loc Qty

Loc Code

ST303

41

113845

11

1145234

30

D3536-25

Manufactured No

230 Each

6.0000

1



Gasket

Location

Loc Qty

Loc Code

FP12

6

57944

6

D3631-1

Manufactured No

230 Each

206.0000

8



Washer

Location

Loc Qty

Loc Code

ST076

206

52693

206

D3791-1

Manufactured No

230 Each

5.0000

1



Wearplate

Location

Loc Qty

Loc Code

FP17

5

56299

5

AN960C10L

Purchased No

230 Each

0.0000

38



washer

NAS 1149C0332R

114341

38 BR 10-6-9

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Page 5

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Wednesday, May 19, 2010 9:19:34 AM

Page 6

Work Order ID: 58800



Parent Item: D350-636-011



Parent Item Name: Skidtube LH

Start Date: 5/18/2010

Required Date: 5/25/2010

Comments: IPP Rev: I 02.09.25 Rearranged procedure steps KJ
 IPP Rev: J 06-03-23 As per Rev D JLM
 IPP Rev: K 06-07.13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC

Start Qty: 1.00

Required Qty: 1.00

D2745 Manufactured No 230 Each 146.0000 8



Bushing



Location	Loc Qty	Loc Code
ST023	146	
52311 ✓	69	
57914	77	

8 BL 10-6-9

AN3C5A Purchased No 230 Each 453.0000 34



Bolt



Location	Loc Qty	Loc Code
ST350	325	
114330	125	
114523 ✓	200	
ST351 114808	128	
113121	10	
114108	45	
114181	73	

52 BL 10-6-9

D3537-1 Manufactured No 230 Each 24.0000 3



Wearpad



Location	Loc Qty	Loc Code
FP 58178	1	
55465	1	
FP17	23	
57256	23	

3 BL 10-6-9

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Wednesday, May 19, 2010 9:19:34 AM

Page 7

Work Order ID: 58800

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

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 IPP Rev:K 06-07.13 As per dsi9343 EC
 IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC

Start Date: 5/18/2010

Required Date: 5/25/2010

Start Qty: 1.00

Required Qty: 1.00

AN960C816L

Purchased No

230 Each

106.0000

1



WASHER

Location

Loc Qty

Loc Code

ST348

106

110584 ✓

100

111424

6

D3492-043

Manufactured No

230 Each

61.0000

8



Plug Assembly

Location

Loc Qty

Loc Code

FP

2

54682

2

FP013

59

57916

59

AN3C6A

Purchased No

230 Each

565.0000

4



BOLT

Location

Loc Qty

Loc Code

ST351

565

111982 ✓

565

NAS1611-013

Purchased No

230 Each

223.0000

8



O-RING

Location

Loc Qty

Loc Code

FP

223

114451 ✓

185

114496

38

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Page 7

W/O:		WORK ORDER CHANGES					
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Work Order ID: 58800

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Parent Item Name: Skidtube LH

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IPP Rev: K 06-07.13 As per dsi9343 EC
IPP Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC

Start Date: 5/18/2010

Required Date: 5/25/2010

Start Qty: 1.00

Required Qty: 1.00

D3535-25 Manufactured No 230 Each 13.0000 1



Wearshoe

Location	Loc Qty	Loc Code
FP18	13	
57943	13	

D3794-1 Manufactured No 230 Each 32.0000 1



Gasket

Location	Loc Qty	Loc Code
FP010	26	
57942	26	
FP014	6	
57537	6	

MS21043-6 Purchased No 230 Each 826.0000 4



NUT

Location	Loc Qty	Loc Code
ST301	826	
112314	826	

D3493-1 Manufactured No 260 Each 33.0000 2



Washer

Location	Loc Qty	Loc Code
ST065	33	
57825	33	

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Page 8

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Page 9

Work Order ID: 58800

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

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IPP Rev: K 06-07.13 As per dsi9343 EC
IPP Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC

Start Date: 5/18/2010

Required Date: 5/25/2010

Start Qty: 1.00

Required Qty: 1.00

MS21083C8

Purchased No

260 Each

41.0000

1

NUT

Location

Loc Qty

Loc Code

ST303

41

113845

11

114523

30

AN8C21A

Purchased No

260 Each

113.0000

2

BOLT

Location

Loc Qty

Loc Code

ST345

113

111605

23

113558

50

114653

40

AN960C816L

Purchased No

260 Each

106.0000

1

WASHER

Location

Loc Qty

Loc Code

ST348

106

110584

100

111424

6

D3672-1

Manufactured No

230 Each

1,375.000

4

Phenolic Washer

Location

Loc Qty

Loc Code

ST077

1375

51674

375

52505

1000

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Page 9

W/O:		WORK ORDER CHANGES					
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Page 10

Work Order ID: 58800



Parent Item: D350-636-011



Parent Item Name: Skidtube LH

Start Date: 5/18/2010

Required Date: 5/25/2010

Comments: IPP Rev: I 02.09.25 Rearranged procedure steps KJ

Start Qty: 1.00

Required Qty: 1.00

IPP Rev: J 06-03-23 As per Rev D JLM

IPP Rev: K 06-07.13 As per dsi9343 EC

IPP Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC

D2741



Blade, 350 Skidtube

Manufactured No 260 Each 28.0000 1



10-6-11 SP

Location

Loc Qty

Loc Code

ST466

28

55905

28

1

D3532-1



Spacer

Manufactured No 260 Each 25.0000 2



10-6-11 SP

Location

Loc Qty

Loc Code

ST068

25

52321

25

2

D3672-13



Phenolic Washer

Purchased No 260 Each 894.0000 2



10-6-11 SP

Location

Loc Qty

Loc Code

ST077

894

54363

894

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8

7

6

5

4

3

2

1

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
38	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
38	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- 1) MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- 2) FINISH:
ACID ETCH, ALONDE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
- 8) WELD PER DART QSI 004
- 9) INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES ($\phi 0.297$) FOR WEARSHOE INSERTS
- 10) FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- 11) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS.
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
POWDER COATING WITH MEK DEGREASER.
- 12) SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- 13) SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

SHOP COPY
RETURN TO
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 58800
BS 10-5-19

RELEASED
6-17-22

F	INCORPORATE DSI 9413; QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/3 REPLACES D3535-13/35 (ZN C8-1); D3794-1/3 REPLACES D3536-13/35 (ZN B8-1); ADD D3791-1 (ZN C8-1); WEARSHOE HOLES UNDER FWD/AFT SADDLE REMOVED (8 PL). WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/-042 HARDWARE UPDATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A6-1); REASON: REF. NCR 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS, CHANGE INSERTS; ADD D3631-1; REMOVE QTY (38) NAS1515H3L; REMOVE QTY (10) NAS1515H8L; REMOVE D2741. QTY (2) AN960C816; REMOVE QTY (2) MS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEO 9133/9157	PH	06.01.05
C	ADD D2750-3/D2750-4; INCORPORATE D2738 AND D2740	CP	98.11.18
B	CHANGE MS24694-S293 TO AN8-16A	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN	DART AEROSPACE USA, INC.		
DRAWN	PORT HADLOCK, WA		
CHECKED	DRAWING NO.	REV. F	
MFG. APPR.	D2750		SHEET 1 OF 11
APPROVED	TITLE		SCALE
DE APPR.	350 SKIDTUBE ASSEMBLY		NTS
DATE	08.07.16		
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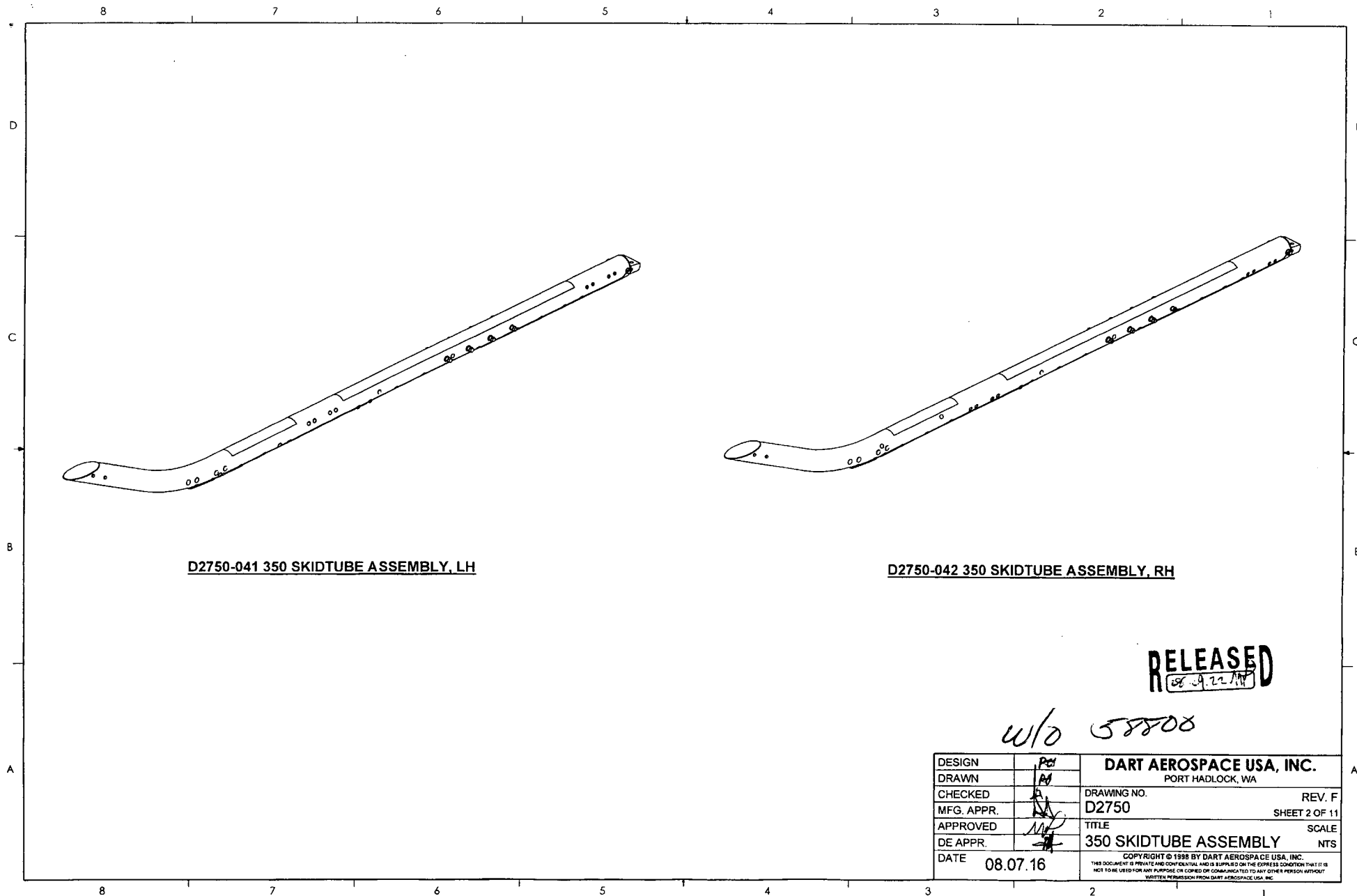
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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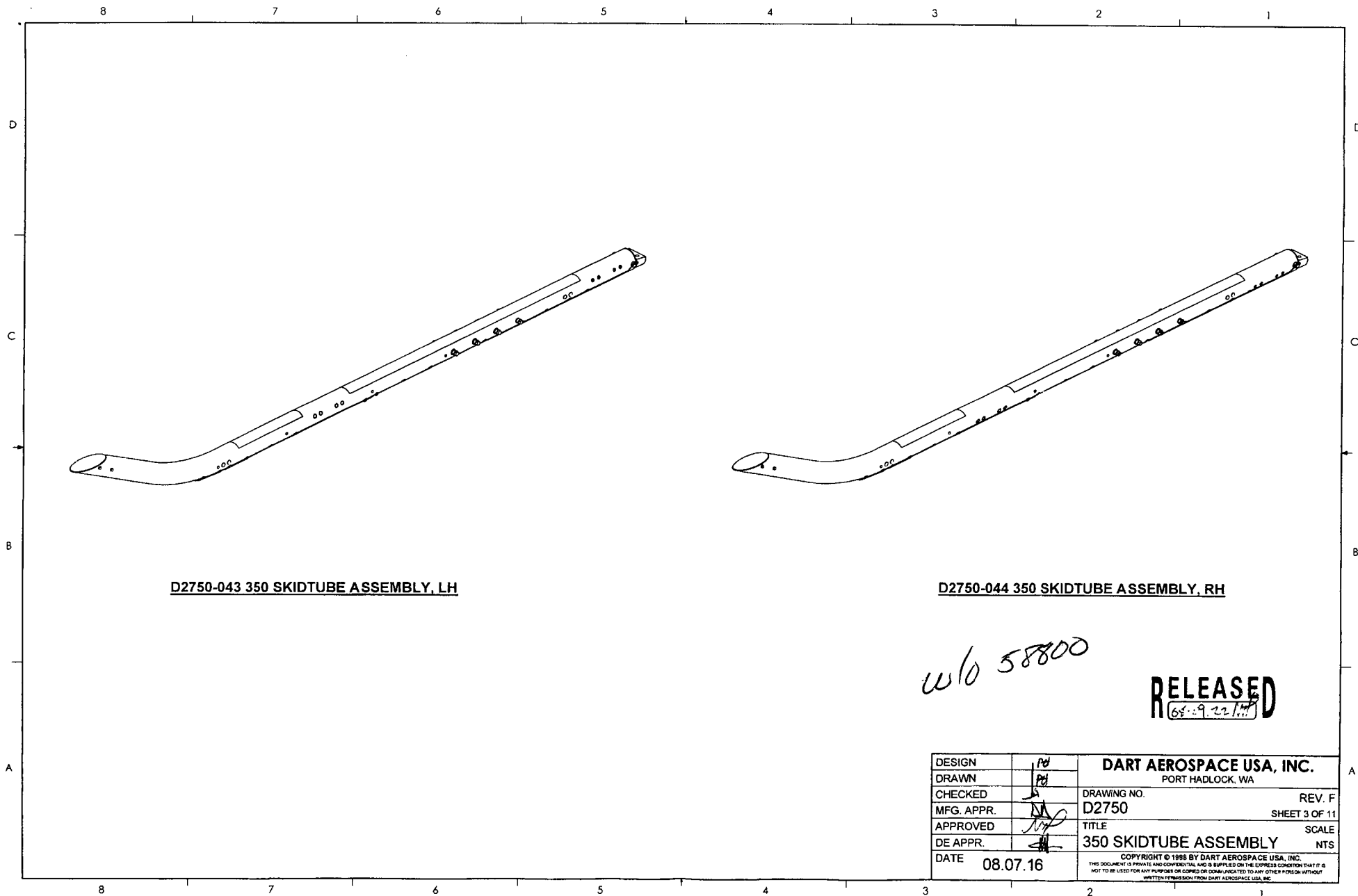
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D2750-043 350 SKIDTUBE ASSEMBLY, LH

D2750-044 350 SKIDTUBE ASSEMBLY, RH

W/O 58800

RELEASED
68-09-22/111

DESIGN	PD	DART AEROSPACE USA, INC.	
DRAWN	PD	PORT HADLOCK, WA	
CHECKED	SA	DRAWING NO. D2750	REV. F
MFG. APPR.	SA	SHEET 3 OF 11	
APPROVED	SA	TITLE	SCALE
DE APPR.	SA	350 SKIDTUBE ASSEMBLY	NTS
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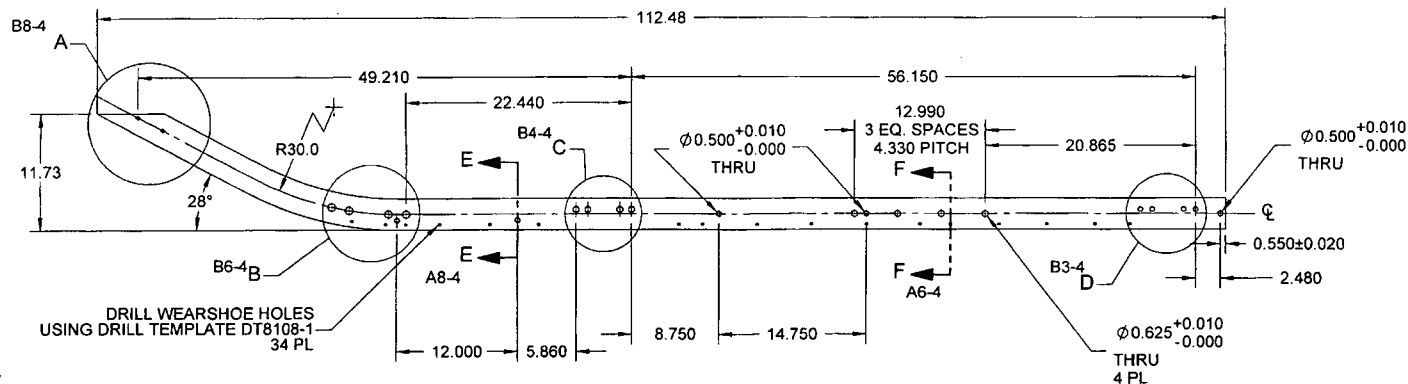
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

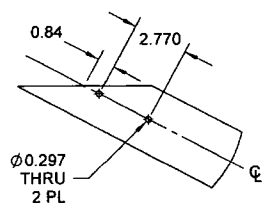
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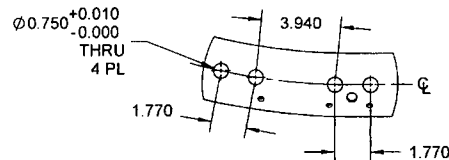
NOTE: Date & initial all entries



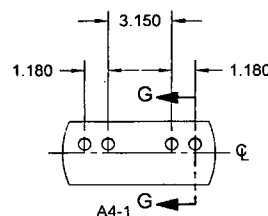
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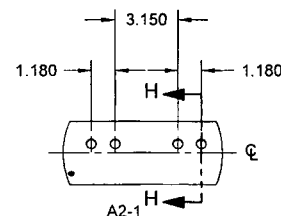
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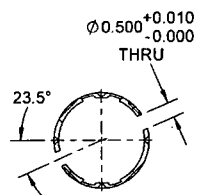
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SCALE 2X



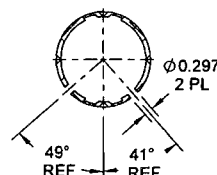
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SCALE 2X



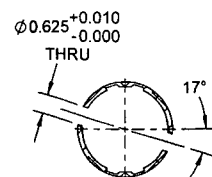
DETAIL D
SCALE 2X



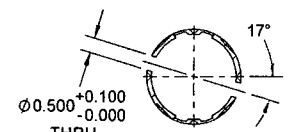
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SCALE 3X, 2 PL



SECTION F-F
SCALE 3X, 17 PL



SECTION G-G
SCALE 3X, 4 PL



SECTION H-H
SCALE 3X, 4 PL

W10 58800

RELEASED

DESIGN	PM	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
DRAWN	PM		
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 4 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	<small>COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

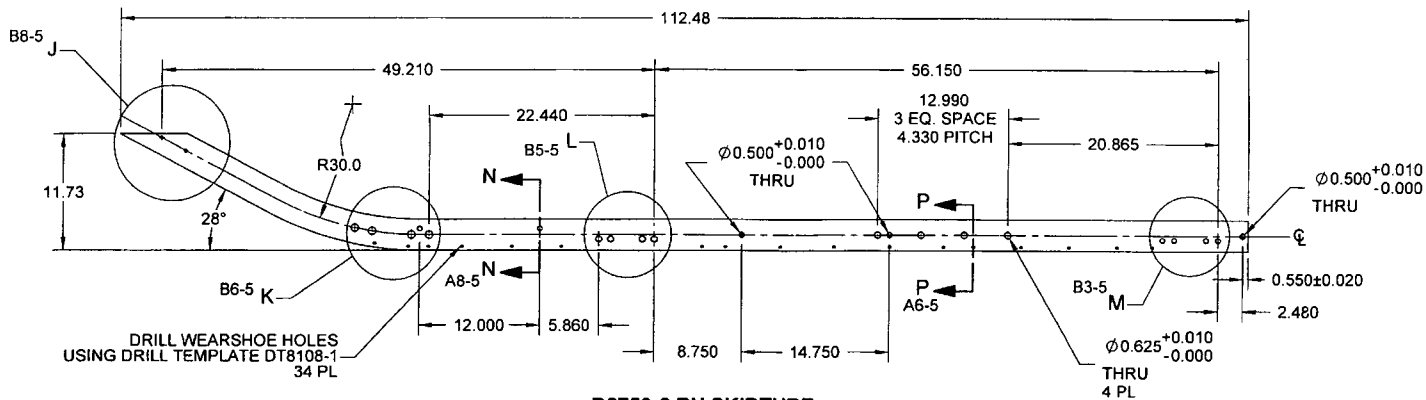
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

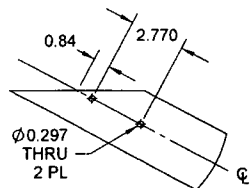
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

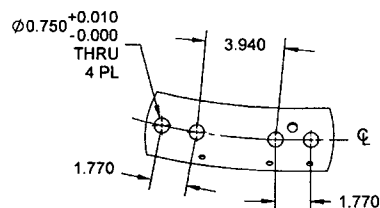
NOTE: Date & initial all entries



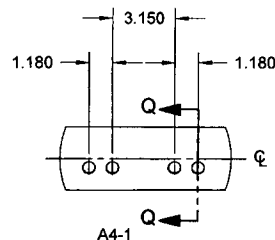
D2750-2 RH SKIDTUBE



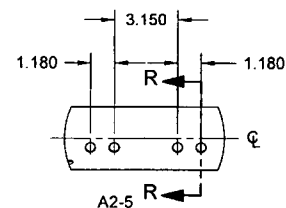
DETAIL J
SCALE 2X



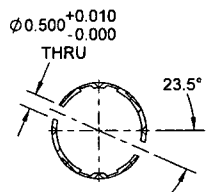
DETAIL K
SCALE 2X



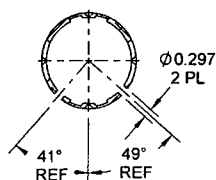
DETAIL L
SCALE 2X



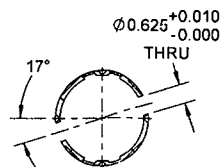
DETAIL M
SCALE 2X



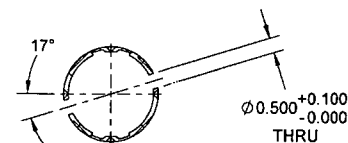
SECTION N-N
SCALE 3X, 2 PL



SECTION P-P
SCALE 3X, 17 PL



SECTION Q-Q
SCALE 3X, 4 PL



SECTION R-R
SCALE 3X, 4 PL

W/ 58800

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DESIGN	PA	DART AEROSPACE USA, INC.	
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MFG. APPR.		D2750	SHEET 5 OF 11
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8

7

6

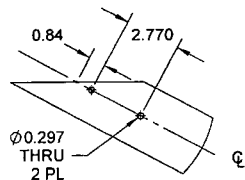
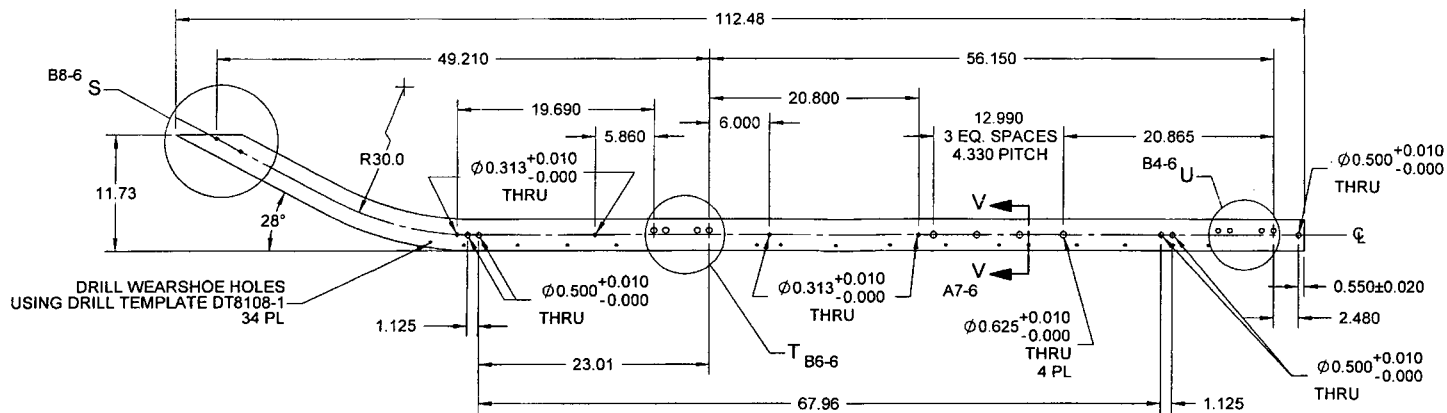
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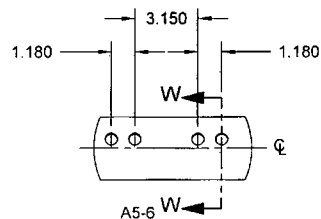
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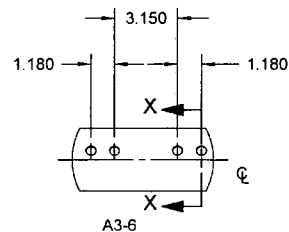
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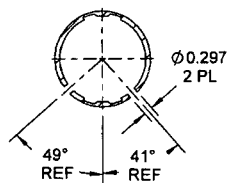
D8-6
SCALE 2X



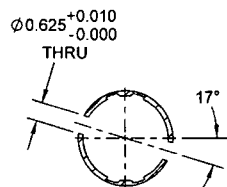
C5-6
SCALE 2X



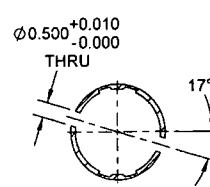
D3-6
SCALE 2X



C4-6
SCALE 3X, 17 PL



B6-6
SCALE 3X, 4 PL



B4-6
SCALE 3X, 4 PL

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08-07-16

DESIGN		DART AEROSPACE USA, INC.	
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8

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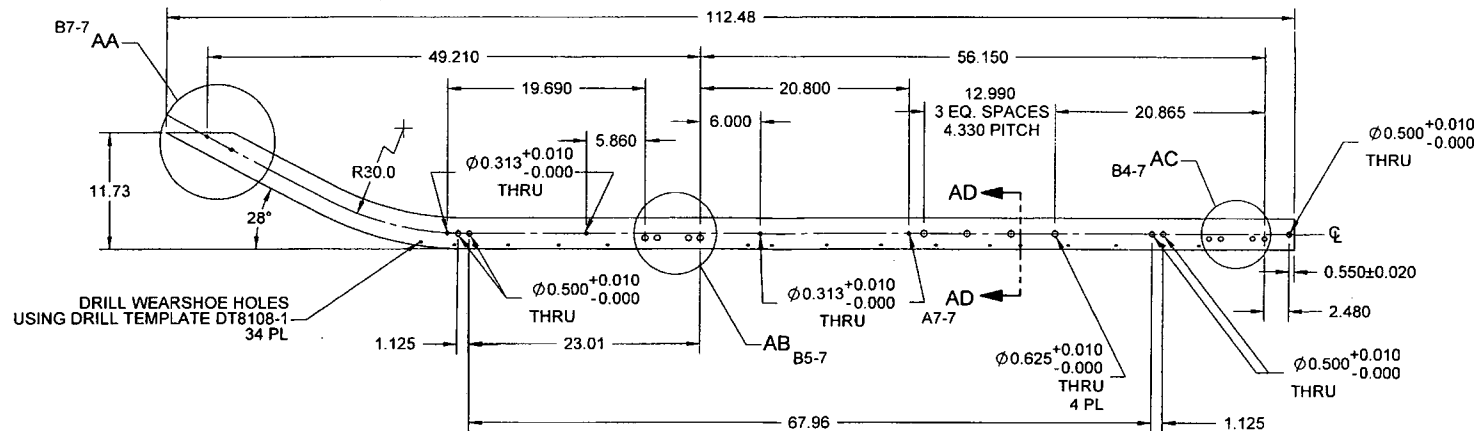
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

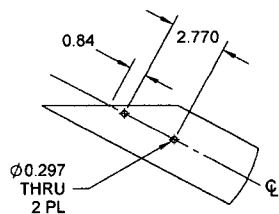
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

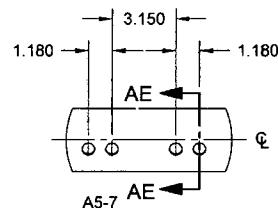
NOTE: Date & initial all entries



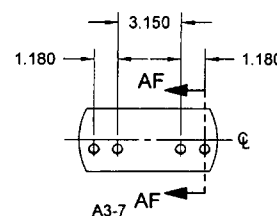
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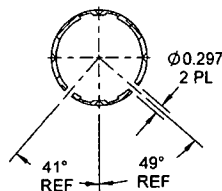
DETAIL AA
SCALE 2X



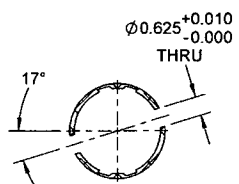
DETAIL AB
SCALE 2X



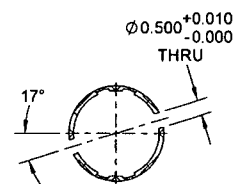
DETAIL AC
SCALE 2X



SECTION AD-AD
SCALE 3X, 17 PL



SECTION AE-AE
SCALE 3X, 4 PL



SECTION AF-AF
SCALE 3X, 4 PL

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08-09-22-714

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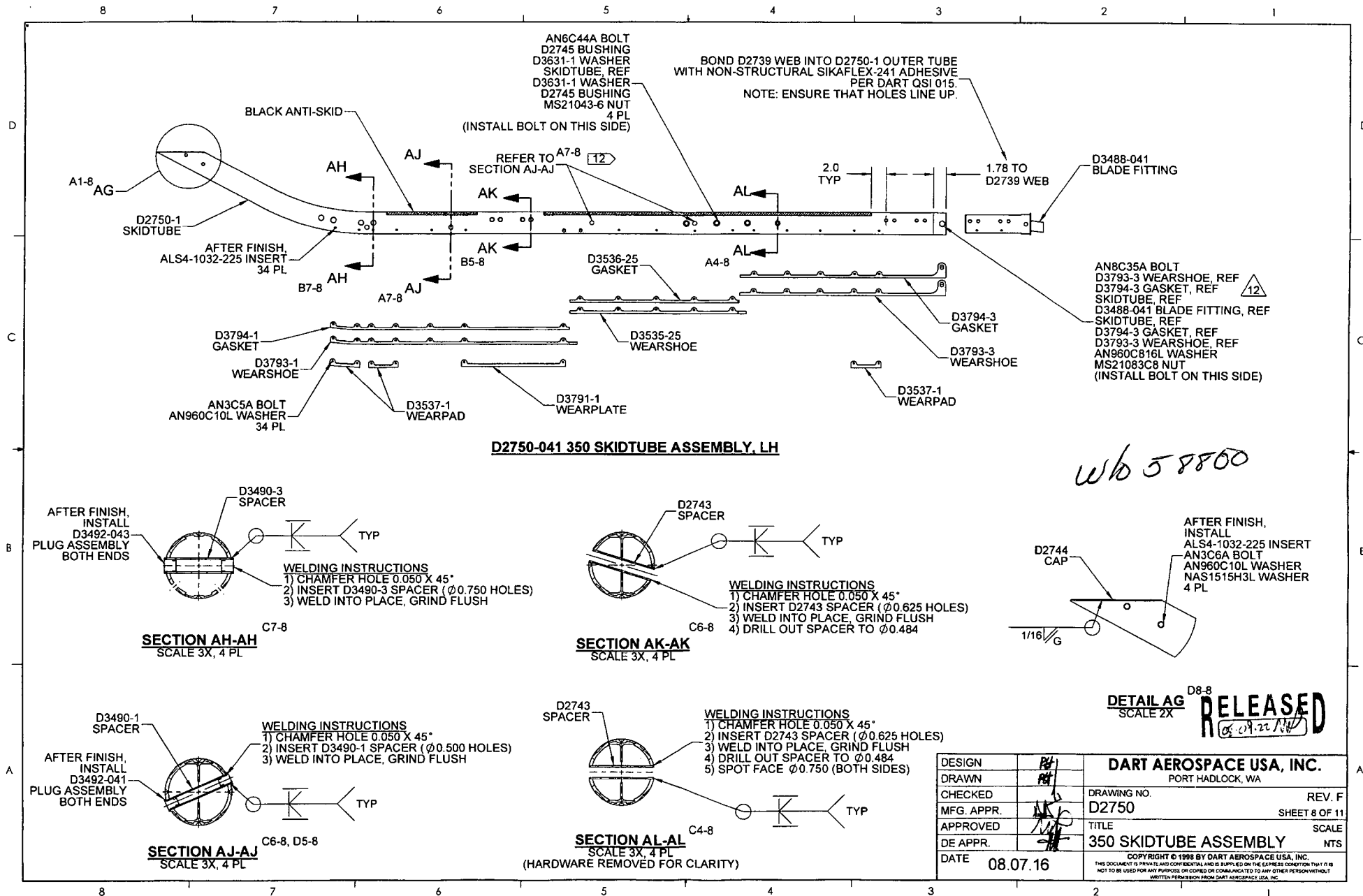
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

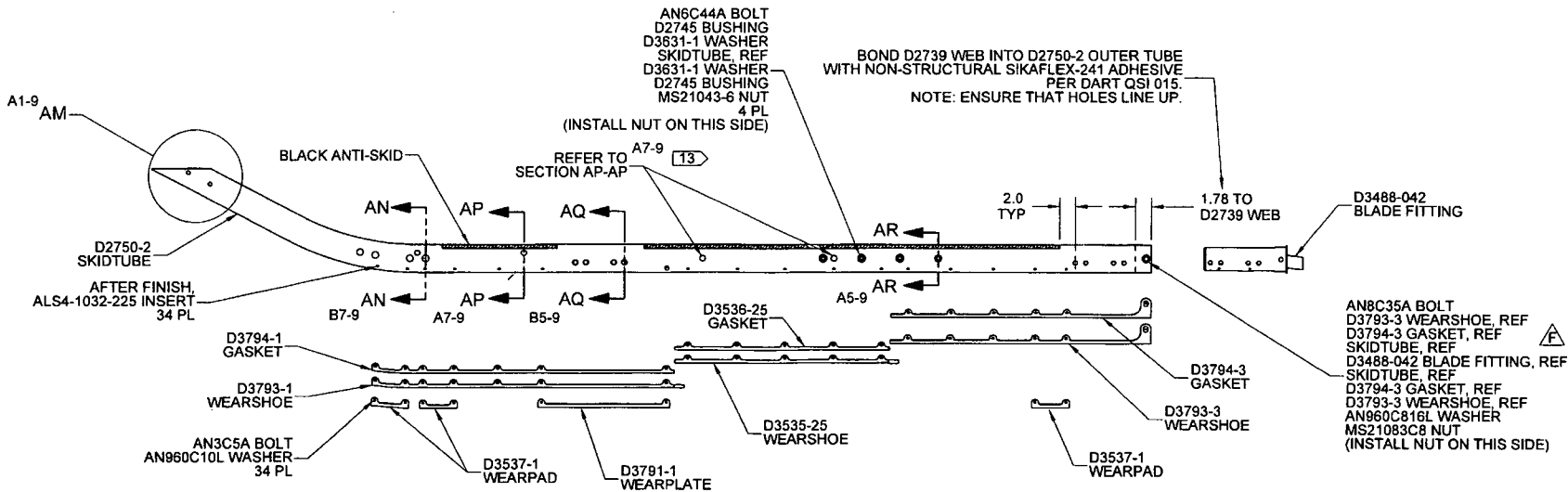
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

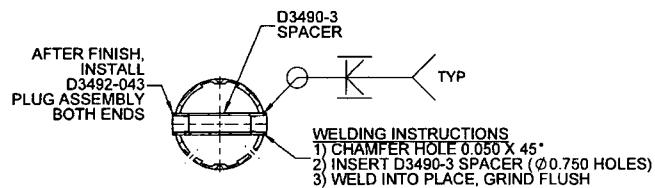
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

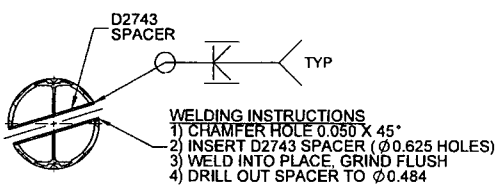
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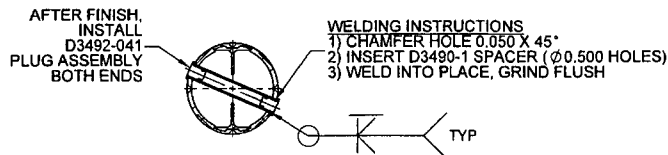
D2750-042 350 SKIDTUBE ASSEMBLY, RH



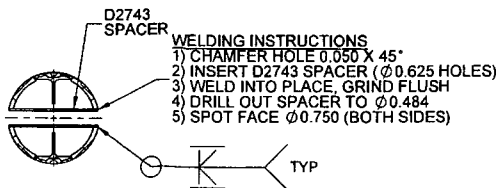
SECTION AN-AN
SCALE 3X, 4 PL



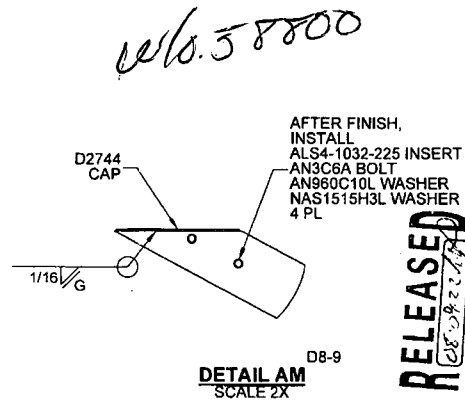
SECTION AQ-AQ
SCALE 3X, 4 PL



SECTION AP-AP
SCALE 3X, 4 PL



SECTION AR-AR
SCALE 3X, 4 PL
(HARDWARE REMOVED FOR CLARITY)



DETAIL AM
SCALE 2X

DESIGN	PA	DART AEROSPACE USA, INC.	
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08/07/16

8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

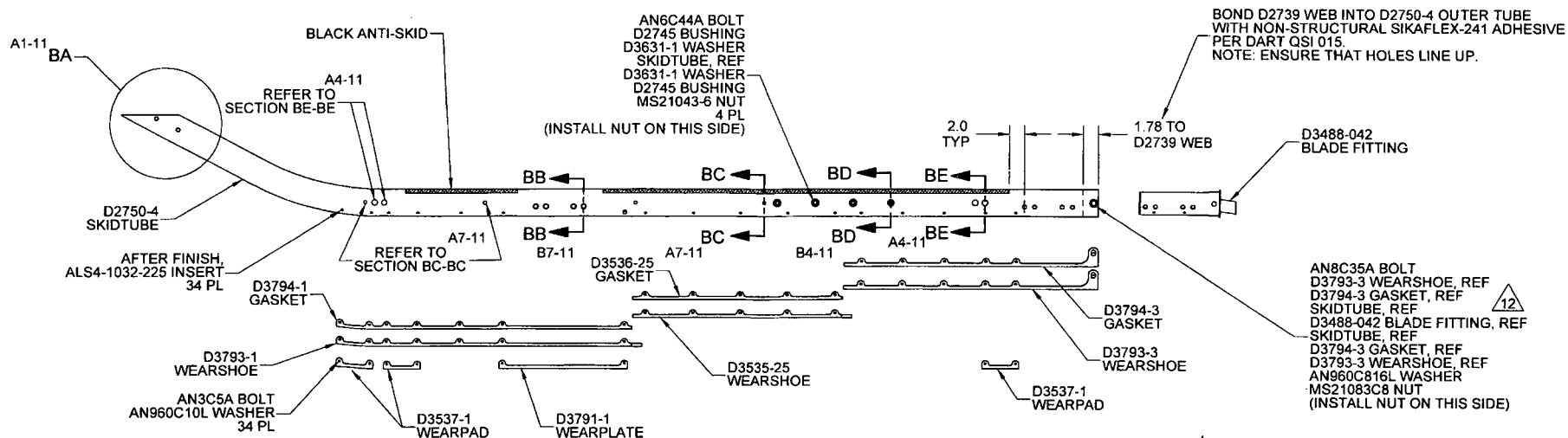
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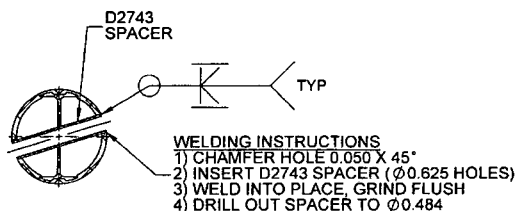
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

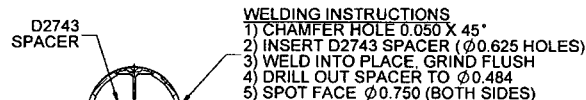
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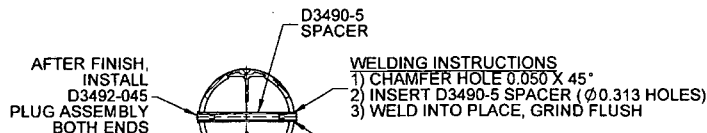
D2750-044 350 SKIDTUBE ASSEMBLY, RH



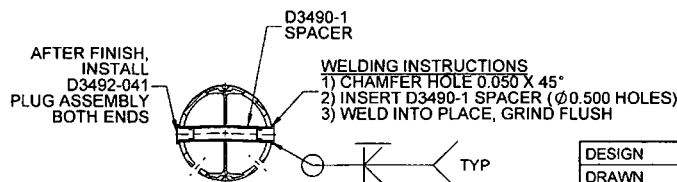
SECTION BB-BB
SCALE 3X, 4 PL



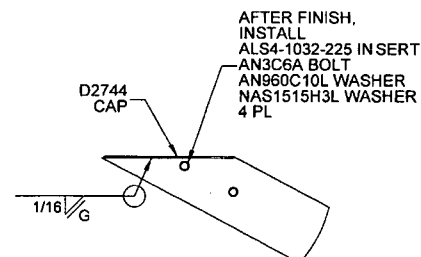
SECTION BD-BD
SCALE 3X, 4 PL
(HARDWARE REMOVED FOR CLARITY)



SECTION BC-BC
SCALE 3X, 4 PL



SECTION BE-BE
SCALE 3X, 4 PL



DETAIL BA
SCALE 2X

DESIGN	RE	DART AEROSPACE USA, INC.	
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CHECKED	RE	DRAWING NO.	REV. F
MFG. APPR.	RE	D2750	SHEET 11 OF 11
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W1058800

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08-07-22 / W1058800

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 233

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barday Elliott
Job number: 58816
Part number: D350-626 014
Description: 350 skid tube
Welding Process: Tig[☒] Mig[]
Base material: Aluminium
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Pat. Dunn Date of Test Coupon 10.06.01

Welder Barday Elliott Date of Test Coupon 10.06.01

The above named individual is qualified in accordance with AWS D17.1.2001 to weld